

(B) IN THE CLAIMS

1. (Currently Amended) 1. A multislice detector array for a CT system comprising:

a plurality of detector modules; the detector modules being comprised of:

a plurality of detector elements, the detector elements being arrayed along both an X-axis

and a Z-axis; wherein the detector elements are arranged in a staggered pattern;

in the Z-direction being coupled together, the coupled detector elements are staggered being arranged in a staggered pattern throughout the detector module.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) A method for sampling for use with a CT system comprising:

providing a plurality of detector arrays in a detector module in a CT system;

providing a plurality of detector elements in a detector array;

connecting an FET array to the detector elements electronically;

determining the number of slices required and the thickness of each slice, and;

providing a staggered detector element array;

staggering the coupled detector elements in the Z-axis throughout the detector module.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) A detector module for use in a computed tomography machine, said detector module apparatus comprising:

a plurality of detector elements;

a switching array electrically connected to the detector elements;

a decoder electronically connected to the switching array;

said decoder coupling adjacent detector elements ~~together to form a staggered array of in~~
the Z-axis and staggering the coupled detector elements throughout the detector array.

10. (Original) The detector module of claim 9 wherein the switching array comprises a plurality of field effect transistors, wherein each field effect transistor has an input, an output, and a control line.

11. (Original) The detector module of claim 10 wherein the decoder controls the switching array to combine outputs of the detector elements.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) The detector module of claim 14 11 wherein the detector elements comprise:

a collimator array;

a scintillator array;

a photodiode array optically coupled to said scintillator array;

a switching array electrically connected to the scintillator array;

a decoder electronically connected to the switch array, said decoder being configured to control operation of said switch apparatus to combine data signals in accordance to select a staggered pattern of data transmitted during detection of the data from the detector module.

16. (Currently Amended) A detector module for a computed tomography system, said detector module comprising:

a collimator array;

a scintillator array;

a photodiode array optically coupled to said scintillator array;

a switching array electrically connected to the scintillator array;

a decoder electronically connected to the switch array, said decoder being configured to control operation of said switch apparatus to combine data signals ~~in accordance to select a staggered pattern of data transmitted during detection of the data from the~~ from adjacent detector module elements coupled together and staggered in the Z-axis throughout a detector array.

17. (Original) The detector module of claim 16 wherein the switching array comprises a plurality of field effect transistors, wherein each field effect transistor has an input, an output, and a control line.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Currently Amended) A method for summing outputs from a ~~diode~~ detector array in a multislice ~~photo detector~~ CT system, having an array of scintillators optically coupled to an array of diodes, said method comprising summing ~~a number of selectively connected cells in the~~

Z-direction adjacent detector elements coupled together along the Z-axis and staggered through the detector array.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)